New Systems

There was one new system in Washington State in 2004. Asotin County created a public transportation benefit authority (PTBA), making Asotin County Transit the 27th transit system in Washington State. Voters approved a 0.2 percent local sales and use tax, with a five-year sunset clause.

In 2005, Columbia County formed a County Transportation Authority. They currently have no local taxing authority and operate their services on grants and contributions from the county government. Columbia County Public Transportation is Washington State's 28th transit system.

Efforts to Increase Public Transportation Tax Rates

Cities, counties, or PTBAs may levy local sales and use taxes up to 0.9 percent for transit programs. As illustrated in the following table, sales and use tax rates range from 0.1 percent for Cowlitz Transit Authority (Kelso/Longview) to 0.9 percent for the Community Transit (Snohomish County PTBA).

Transit systems no longer receive matching motor vehicle excise tax (MVET) distributions as of January 1, 2000, since the passage of Initiative 695. Voters have approved local sales tax increases for 15 transit systems since the loss of MVET.

2004 Elections

- In May 2004, voters approved a ballot measure to increase local sales and use tax by 0.3 percent to 0.6 percent for Spokane Transit. The measure includes a sunset clause of June 30, 2009.
- In September 2004, voters approved a ballot measure to increase local sales and use tax by 0.3 percent to 0.6 percent for Everett Transit.
- In November 2004, voters approved an increase of 0.1 percent sales and use tax to 0.2 percent to sustain public transportation services for Twin Transit (Lewis County) but rejected a local initiative to increase C-TRAN's (Clark County) 0.3 percent sales and use tax to 0.6 percent.

Local Sales and Use Tax Authorized for Public Transportation

	Transit System	Authority*	Last Changed	Sales Tax Rate
1	Asotin County Transit	PTBA	2004	0.2%
2	Ben Franklin Transit	PTBA	2002	0.6%
3	Clallam Transit System	PTBA	2000	0.6%
4	Columbia County Public Transportation	CTA	2005	0.0%
5	C-TRAN (Clark)	PTBA	1980	0.3%
6	Community Transit (Snohomish)	PTBA	2001	0.9%
7	Cowlitz Transit Authority (CUBS)	PTBA	1987	0.1%
8	Everett Transit	City	2004	0.6%
9	Garfield County Transportation[1]	UTBA	N/A	0.0%
10	Grant Transit	PTBA	1996	0.2%
11	Grays Harbor Transportation Authority	CTA	2000	0.6%
12	Intercity Transit (Thurston)	PTBA	2002	0.6%
13	Island Transit	PTBA	2000	0.6%
14	Jefferson Transit Authority	PTBA	2000	0.6%
15	King County Metro Transit	County	2000	0.8%
16	Kitsap Transit	PTBA	2001	0.8%
17	Link Transit (Chelan/Douglas)	PTBA	1990	0.4%
18	Mason County Transportation Authority	PTBA	2001	0.6%
19	Pacific Transit	PTBA	1979	0.3%
20	Pierce Transit	PTBA	2002	0.6%
21	Pullman Transit[2]	City	1978	0.0%
22	Skagit Transit	PTBA	1992	0.2%
23	Sound Transit[3]	Regional	1996	0.4%
24	Spokane Transit Authority	PTBA	2004	0.6%
25	Twin Transit (Lewis)	PTBA	2004	0.2%
26	Valley Transit (Walla Walla)	PTBA	1980	0.3%
27	Whatcom Transportation Authority	PTBA	2002	0.6%
28	Yakima Transit	City	1980	0.3%

**PTBA = Public Transportation Benefit Area; UTBA = Unincorporated Transportation Benefit Area; CTA = County Transportation Authority.*

[1]Garfield County Transportation is financed by locally generated tax revenues rather than sales tax.

[2]Pullman Transit receives two percent of local utility taxes.

[3]In November 1996, voters approved local funding for Sound Transit that included a 0.4 percent local sales and use tax, a 0.3 percent motor vehicle excise tax, and a rental car tax to finance the construction and operation of the regional transit system.

Federal Funding

Congress appropriated federal funding for public transportation programs for the federal fiscal year ending September 2004 consistent with levels authorized in the Transportation Equity Act for the 21st Century (TEA-21). The following tables show that Washington was eligible for $14,239,607 in Section 3037 Job Access and Reverse Commute (JARC) funding and $224,842,896 in Section 5307, 5309, and 5311 transit funding.

Federal Section 3037 Job Access and Reverse Commute (JARC) Funding for 2004

Recipient/Project	Funding	Source
State of Washington	$2,955,440	FY 2002 Allocation
WA WorkFirst Initiative	$1,226,060	FY 2002 Allocation
Community Transportation Assoc.	$148,601	FY 2003 Allocation
WA WorkFirst Initiative	$4,705,687	FY 2003 Allocation
Ways to Work-EPIC Yakima	$495,335	FY 2003 Allocation
I-405 Congestion Relief Project	$1,982,519	FY 2004 Allocation
Link Transit JARC Program	$495,630	FY 2004 Allocation
Vanpooling Enhancement	$743,445	FY 2004 Allocation
Trip Reduction Incentives	$991,260	FY 2004 Allocation
Transit Car-Sharing Job Access	$495,630	FY 2004 Allocation
Total	**$14,239,607**	

2004 Federal TEA-21 Funding

Area	Funding	Source	Purpose
Seattle-Everett	$74,476,846	Section 5307	Formula
Spokane	$5,347,303	Section 5307	Formula
Seattle	$22,120,743	Section 5309	Fixed Guideway
Sound Transit/ Central Link	$73,813,414	Section 5309	New Starts
Sound Transit/Sounder Commuter Rail	$9,900,131	Section 5309	New Starts
C-TRAN	$245,565	Section 5309	Bus and Facilities
Community Transit	$2,946,779	Section 5309	Bus and Facilities
Edmonds Multimodal Facility	$1,964,520	Section 5309	Bus and Facilities
Everett Transit	$982,260	Section 5309	Bus and Facilities
King County Metro	$4,911,299	Section 5309	Clean Air Buses
Mukilteo Turnaround	$39,290	Section 5309	Bus Facilities
Mukilteo	$589,356	Section 5309	Park and Ride Lot
Pierce Transit	$982,260	Section 5309	Bus and Facilities
Community Transit	$1,964,520	Section 5309	Park and Ride Lot
Marysville	$1,082,250	Section 5307	Formula
Sound Transit	$1,964,520	Section 5309	Regional Buses
Kennewick-Richland	$1,561,859	Section 5307	Formula
Yakima	$1,272,380	Section 5307	Formula
Bremerton	$1,670,330	Section 5307	Formula
Olympia-Lacey	$1,364,391	Section 5307	Formula
Bellingham	$981,437	Section 5307	Formula
Longview	$668,666	Section 5307	Formula
Mount Vernon	$492,104	Section 5307	Formula
Wenatchee	$601,743	Section 5307	Formula
Intercity Transit	$982,260	Section 5309	Bus and Facilities
Kitsap Transit	$982,260	Section 5309	Bus and Facilities
Link Transit	$785,808	Section 5309	Bus and Facilities
Statewide Rural	$4,231,465	Section 5311	Formula
Clallam Transit	$245,565	Section 5309	Bus and Facilities
Grant Transit	$491,130	Section 5309	Bus and Facilities
Grays Harbor Transit	$73,669	Section 5309	Bus Facilities
Jefferson Transit	$196,452	Section 5309	Bus
Jefferson Transit	$982,260	Section 5309	Bus Facilities
Mason Transit	$196,452	Section 5309	Bus Facilities
Statewide Small Bus	$3,731,605	Section 5309	Bus
Annual Total*	**$224,842,896**		

**Excludes Vancouver Section 5307 Formula shared with Portland, Oregon.*

State Funding

The 2003 Washington state Legislature approved new funds for public transportation projects over ten years. Through the 2003 Legislative Transportation Package, WSDOT was able to expand the Rural Mobility Grant Program and add new Paratransit/Special Needs Grants. The 2005 Transportation Partnership Package augmented the state's public transportation program with additional funding for Paratransit/Special Needs Grants. A complete listing of the grant awards can be found in Appendix 2.

Local Funding

Statewide, **local tax revenues increased 6.19 percent** from 2003.

- Local tax revenues increased by more than 10 percent over 2003 for the following transit systems: C-TRAN, Clallam Transit, Island Transit, and Jefferson Transit. Local tax revenues increased by more than 20 percent for Spokane Transit and Whatcom Transportation Authority.
- Five transit systems received less sales tax revenue in 2004 than in 2003—Ben Franklin Transit, Cowlitz Transit, Everett Transit, Intercity Transit and Grays Harbor Transit

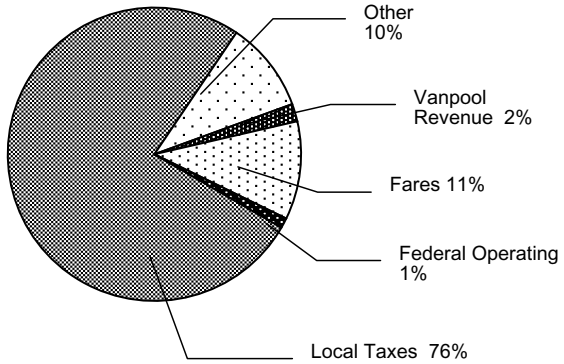
Statewide, **farebox revenue increased 6.53 percent** from 2003.

- Everett Transit, Sound Transit, Ben Franklin Transit, Cowlitz Transit, Kitsap Transit, Clallam Transit, Grays Harbor Transit and Pullman Transit increased farebox revenue and ridership for each service type.

Statewide, **vanpool revenue increased 6.69 percent** from 2003.

The chart, *Sources of Operating Revenues, 2004*, shows the percentage shares of operations-related revenue according its source.

Sources of Operating Revenues, 2004



Statewide Levels of Service

5,337,565 residents of Washington State lived within a transit system boundary in 2004. Using the 2004 U.S. Census Population projection for Washington State, this represents 86.5 percent of the state's population—compared to 86.1 percent in 2003. King County represents 1,788,300 residents, or 29.7 percent of the state's population that live within a public transportation boundary.

Statewide, transit systems decreased revenue vehicle hours for fixed route and route deviated services, and increased revenue vehicle miles for fixed route and route deviated services in 2004. Statewide, transit systems increased both revenue vehicle hours and revenue vehicle miles for demand response and increased revenue vehicle miles for vanpool services in 2004.

Statewide, **fixed route revenue vehicle hours decreased 4.35** percent in 2004.

- Pullman Transit increased fixed route revenue vehicle hours and miles by over 20 percent.

- Valley Transit and Everett Transit reduced fixed route revenue vehicle hours by more than 5 percent.

Statewide, **route deviated revenue vehicle hours decreased 1.39** percent in 2004.

- Link Transit and Valley Transit increased route deviated revenue vehicle hours and revenue vehicle miles by over 40 percent.
- Jefferson Transit reduced route deviated revenue vehicle hours and revenue vehicle miles by over 10 percent.

Statewide, **demand response services increased 8.31** percent.

- Everett Transit, Ben Franklin Transit, Twin Transit, and Valley Transit increased both demand response revenue hours and miles by over 10 percent. Skagit Transit, Yakima Transit, and Grant Transit increased demand response services by over 30 percent.
- No transit agency reduced demand response revenue vehicle hours by more than 5 percent.

Statewide, **vanpool services revenue miles increased 5.61** percent.

- Ben Franklin Transit, Yakima Transit and Kitsap Transit increased vanpool revenue miles by at least 15 percent from 2003. Mason Transit started a vanpool program in 2004.
- Although most systems sustained vanpool operations at 2003 levels of service, five systems reported a slight reduction in vanpool revenue miles in 2004. C-TRAN significantly reduced their vanpool program in 2004.

Commuter rail increased revenue vehicle hours 20.09 percent, light rail increased revenue vehicle hours 44.60 percent, and passenger ferry maintained service levels in 2004.

Ridership

In 2004, statewide public transportation services reported 170,557,545 passenger trips. This is an increase of 4.82 percent over 2003 ridership levels.

Statewide, **fixed route passenger trips increased 4.42 percent** from 2003 levels. In 2004, fixed route service provided over 92 percent of all passenger trips supplied by public transportation in the state.

- Fixed route ridership increased 4.01 percent for transit systems serving in urbanized areas and increased 5.27 percent for transit systems serving small city areas. Transit systems serving rural areas increased fixed route ridership 7.66 percent.

Statewide, **demand response passenger trips increased 6.49 percent** from 2003 levels.

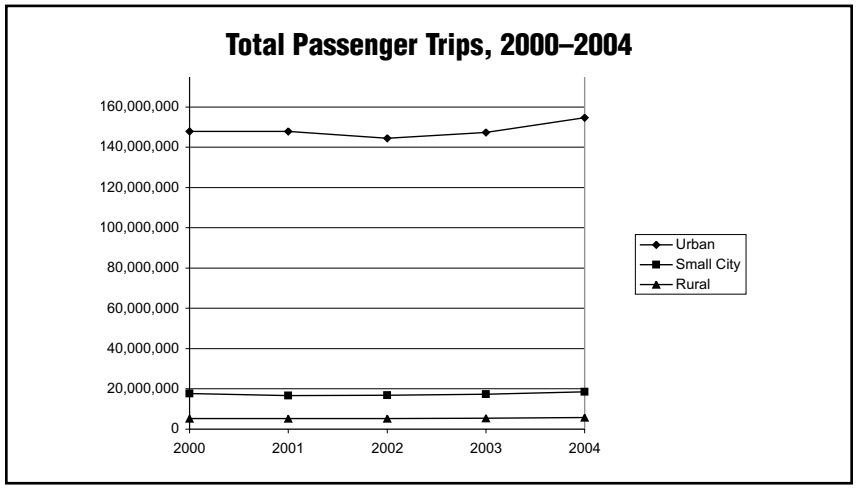
- Ridership on demand response services of transit systems serving small cities increased 10.48 percent, those serving urban areas increased 3.73 percent, and those serving rural areas increased 7.74 percent.

Statewide, **route deviated ridership decreased 6.55 percent** from 2003 levels.

Statewide, **vanpool programs carried 3.44 percent more passengers in 2004** than in 2003. The greatest percent increase was for Yakima Transit and Ben Franklin Transit.

Passenger trips increased 14.83 percent from 2003 levels for passenger ferry and 27.18 percent for commuter rail. Light rail passenger trips increased 77.98 percent, the highest increase of any service type, due to Sound Transit Tacoma Link light rail's first full year of service in 2004.

The chart, *Total Passenger Trips, 2000–2004*, shows how combined passenger trips for fixed route, demand response, and route deviated services changed between urbanized, small city, and rural areas.



In 2004, Community Transit and Pullman Transit increased both fixed route passenger trips and farebox revenue by more than 10 percent.

Kitsap Transit, Skagit Transit, and Valley Transit increased both demand response passenger trips and farebox revenue by more than 12 percent in 2004.

Valley Transit and Link Transit made significant shifts in route deviated service in 2004. Valley Transit started offering route deviated service in 2003 and increased route deviated passenger trips and farebox by more than 400 percent. Link Transit increased both route deviated passenger trips and farebox by more than 60 percent in 2004.

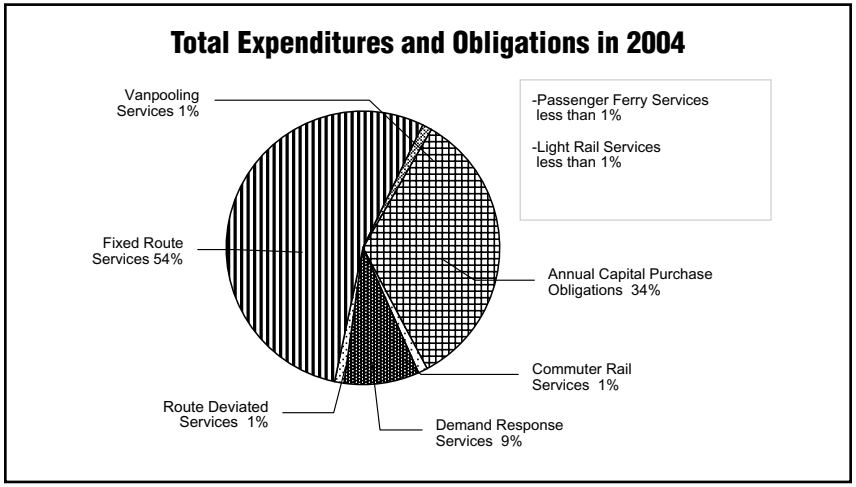
Expenditures

Operating Expenses

Overall, the operating expenses for public transportation increased in 2004 by 6.69 percent statewide. Operating costs increased for all service types except light rail compared to 2003. In 2004, operating expenses for:

- fixed route services increased 6.02 percent
- route deviated increased 20.35 percent
- demand response increased 10.62 percent
- vanpool increased 9.52 percent
- passenger ferry increased 33.91 percent
- commuter rail increased 17.70 percent
- light rail reduced by 40.88 percent

The chart, *Total Expenditures and Obligations in 2004*, shows the percentage shares.



Performance Measures for Public Transportation

As required by 35.58.2796 RCW, this section includes several performance measures:

- Passenger trips per vehicle revenue hour
- Passenger trips per vehicle revenue mile
- Operating costs per vehicle revenue huor
- Operating costs per vehicle revenue mile
- Operating costs per passenger trip
- Farebox recovery

The performance measures are reported with statewide statistics including all transit systems and with averages for groups of transit systems based on the size of the communities served—urban, small city, and rural. Performance measures for individual systems are included at the end of each system profile.

In previous summaries, the medians—the midpoint in the range of each service area—were reported. For consistency with Transit Benchmarks, the 2004 Summary has converted to averages.

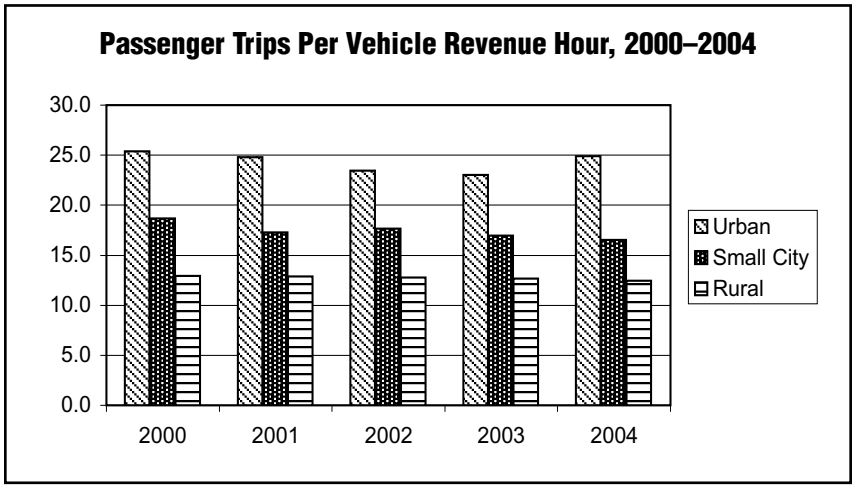
Passenger Trips per Vehicle Revenue Hour and Passenger Trips per Vehicle Revenue Mile

Two performance measures, passenger trips per vehicle revenue hour and passenger trips per vehicle revenue mile, reflect service effectiveness. These measures are affected by the seating capacity of buses used and how often they operate. Typically, systems serving larger populations use larger buses and operate more frequently.

"Passenger trips per vehicle revenue hour" indicates how many people a transit system transports in an hour of service. In 2004:

- Fixed route service carried more passengers per revenue hour than other service types, with averages ranging between 20.5 passengers per revenue vehicle hour in rural areas to 24.6 passengers in urban areas. In 2003, rural areas averaged 16.3 passenger trips per revenue hour and urban systems had 21.8 passenger trips per revenue hour.
- Route deviated service carried fewer passengers per revenue hour than fixed route service with 7.5 passengers per revenue vehicle hour. This rate is up 2.5 passengers per revenue vehicle hour from 2003.
- Demand response service carried the fewest passengers per revenue hour than other service types, with averages ranging between 3.1 passengers per revenue vehicle hour in small city areas and 2.7 passengers in both rural and urban areas. This is slightly lower than 2003.

Statewide, overall passenger trips per vehicle revenue hour slightly increased compared to 2003 for transit systems serving urban, small city, and rural areas. The *Passenger Trips Per Vehicle Revenue Hour, 2000-2004* chart displays the pattern for this performance measure in Washington State.



Operating Costs per Vehicle Revenue Hour and Operating Costs per Vehicle Revenue Mile

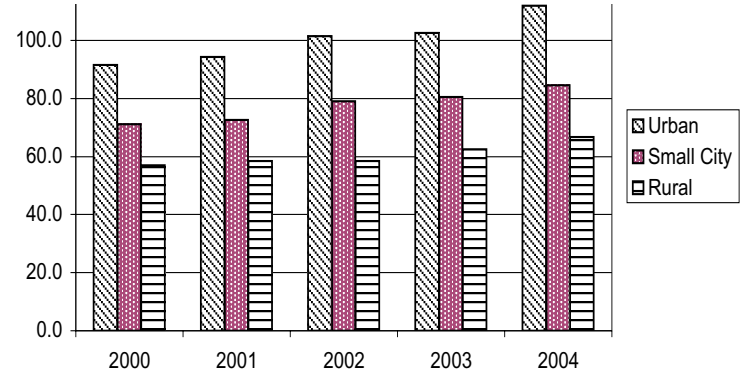
Operating costs per vehicle revenue hour and operating costs per vehicle revenue mile are measures of efficiency. Operating costs are affected by overhead (administrative staff needed to respond to requirements of federal and local jurisdictions which are more comprehensive in urban areas) and the number of operating bases for vehicles (one base serving a large area means higher fuel and labor costs expended to get to and from routes for both revenue and service vehicles).

"Operating costs per vehicle revenue hour" depicts total operating costs as a function of the number of hours a transit system provides revenue service. In 2004:

- Fixed route service had the highest operating costs per vehicle revenue hour compared to other types of service, with averages ranging between $74.61 per vehicle revenue hour in rural areas to $98.64 in urban areas.
- Demand response service was less expensive per vehicle revenue hour than fixed route service, with averages ranging between $54.55 per vehicle revenue hour in rural areas to $67.93 in urban areas.
- Route deviated service in rural areas was about the same cost per vehicle revenue hour as demand response service at $62.31 per vehicle revenue hour.

Statewide, the average overall operating costs per vehicle revenue hour in 2004 increased by 6.03 percent for fixed route service and 4.31 percent for demand response service. The following chart displays the pattern for this performance measure in Washington State.

Operating Costs Per Vehicle Revenue Hour, 2000–2004



Operating Costs per Passenger Trip

Use of service measured by passenger trips is an independent variable. Often passengers ride due to low fare rates (including those subsidized by employers and schools), superior marketing, or good service between origin and destination. Therefore, a low cost per passenger trip may be more representative of the system's use—just as a high cost per passenger trip might reflect higher fare rates, ineffective marketing, and/or less frequent service.

"Operating costs per passenger trip" reflects annual operating costs—not including debt service, capital purchases, or less typical transit costs such as rideshare coordination—as a function of the number of passengers a transit system transported in fixed route, demand response, and route deviated services. In 2004:

- Fixed route service costs the least per passenger trip of all the service types, with averages ranging between $4.21 in the urban areas and $4.97 in the rural areas. Costs decreased slightly in urban areas but increased 3.54 percent in rural areas.
- Demand response service costs the most per passenger trip of all the service types, with averages ranging between $21.77 per passenger trip in rural areas to $25.78 in urban areas. Costs in rural areas increased substantially with 22.5 percent rise in the average. Statewide, demand response service costs increased 13.1 percent over 2003.
- Average operating costs per trip for route deviated service in 2004 was less than demand response service at $8.98 per passenger trip. This was an increase of 1.47 percent from 2003.

Farebox Recovery/Vanpool Revenue Recovery

Local policies affect farebox recovery. Lower recovery rates, particularly for demand response service, is due to fare-free or reduced fare policies practiced by most transit systems for the categories of passengers most likely to use or need this type of service: elderly persons and persons with disabilities.

Farebox recovery (percent of annual operating costs recovered by passengers paying fares for all transit services except vanpools):

- Fixed route services historically have higher farebox recovery ratios. In 2004, the farebox recovery for fixed route service in urban areas was 17.55 percent, small city was 7.86 percent, and rural was 14.57 percent. Statewide, the farebox recovery ratios for fixed route service decreased by 2.03 percent.
- Statewide, route deviated and demand response services had farebox recovery ratios in 2004 of 5.15 percent and 2.62 percent respectively. This represents a 21.97 percent reduction in farebox recovery ratio for route deviated and 15.56 percent reduction for demand response services compared to 2003.

Some public transportation is fare-free for passengers including Sound Transit's Tacoma Link light rail and most of Island Transit's services.

Vanpool services report a revenue recovery ratio. This calculation compares the annual operating costs recovered by vanpool user fees. In some transit agencies, vanpool fees are also expected to cover a portion of capital costs. The vanpool revenue recovery ratio is established by board policy.

- In 2004, the statewide revenue recovery ratio for vanpool services was 71.9 percent. In 2004, the revenue recovery ratio for the 15 transit agencies that operate vanpool services ranged between 154 percent (Island Transit) and 39 percent (Mason Transit).

Public Transportation Performance Measures

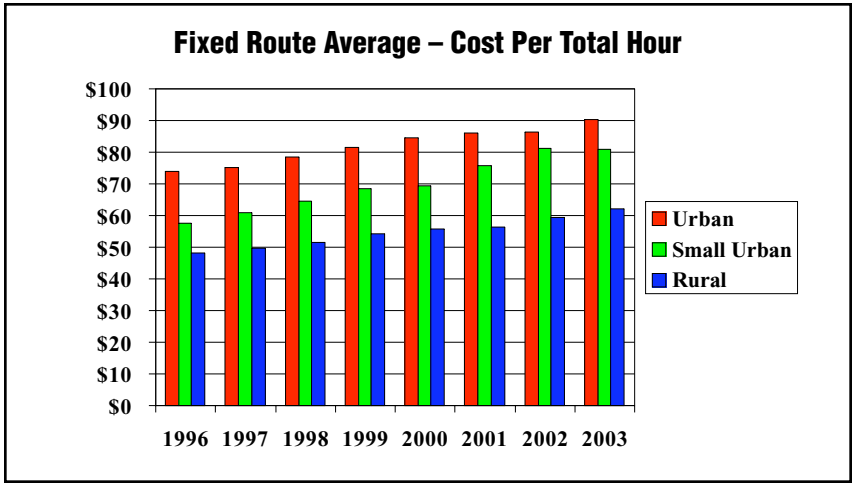
Prepared by: Washington State Transit Association (WSTA)

This report presents measures of the performance of public transportation systems in Washington from 1996 to 2003. These measures are designed to track the performance of public transportation in the areas of cost efficiency (operating cost per total hour), cost effectiveness (cost per boarding and cost per passenger mile), and service effectiveness (unlinked passengers or boardings per revenue hour). These measures are applied to the fixed-route transit, demand-responsive transit, and vanpool systems operated by transit systems. Not all measures are used for each mode due to data availability. In addition to looking at the performance of fixed-route systems by area served (urban, small urban, and rural), the performance of each of the large transit systems on the four measures is presented. In all cases where data is aggregated, the average or mean value is used. The data sources are the National Transit Database and the *Washington State Summary of Public Transportation Systems*.

> ***Note:*** The performance measures prepared by WSTA differ from the performance measured prepared for the *Summary of Public Transportation* due to different assumptions used. WSTA includes route deviated service in the fixed route category, whereas fixed route and route deviated services are reported separately in the *Summary of Public Transportation*. In addition, WSTA's analysis includes cost and operational data from each transit system in its original classification, whereas WSDOT reports them in their current federal classification. For example, Skagit Transit and Link Transit transitioned from rural areas to small urban/small city areas with the 2000 U.S. Census. WSTA elected to continue to calculate these two transit systems in the rural category for consistency in trend analysis and WSDOT reports them in their current federal classification of small urban/small city.

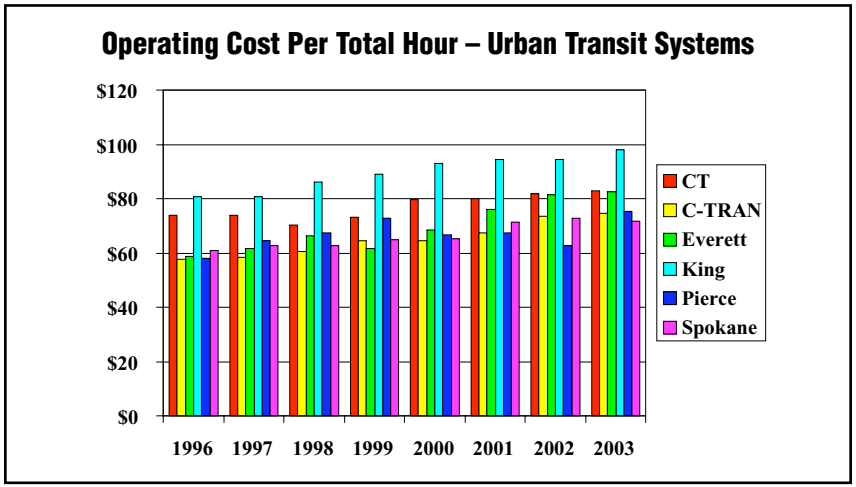
Transit Cost Efficiency

The following chart illustrates the trend in cost per passenger hour from 1996 to 2003. The chart illustrates that costs are directly related to the size of the transit system and the nature of the area served. Larger transit systems are more complex and incur costs for fixed facilities (transit centers, park-and-ride lots, etc.), security, and in other areas that are not cost items for smaller systems. They also operate larger equipment and operate in metropolitan areas with higher wage structures than small systems.



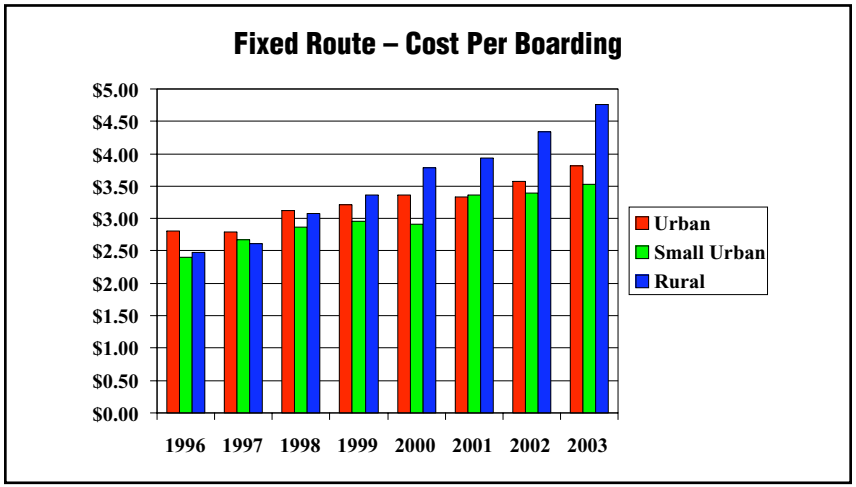
The urban categories have experienced cost increases of approximately 22 percent, or 3 percent per year, from 1997 to 2003. This is in line with inflation over this period. Rural systems have seen a 29.0 percent increase. The small urban systems experience a higher rate of cost increase over this period (40.1 percent). This appears to be due to significant service reductions by these systems in 2000 and 2001 resulting in fixed costs being spread over fewer service hours.

The following chart illustrates the above observations hold true within the group of urban transit systems. The highest costs are experience by King County Metro. Metro operates a fleet of articulated and electric trolley buses as well as the bus tunnel, park-and-ride lots, and numerous other fixed facilities.

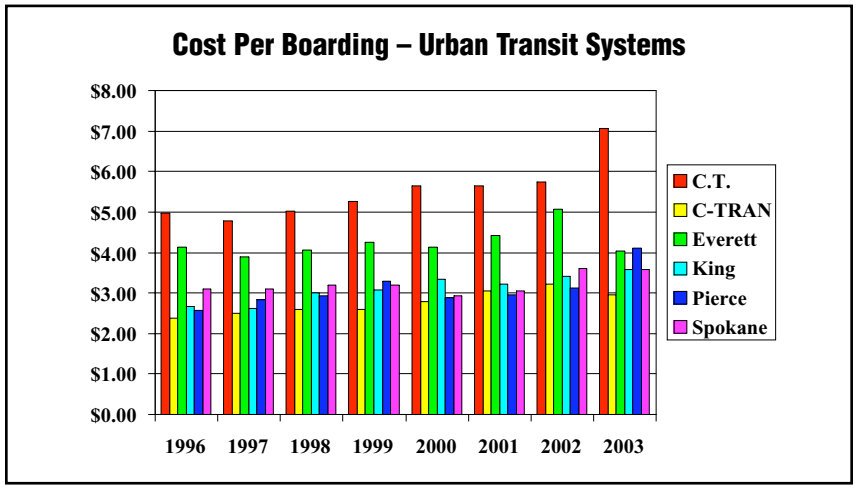


Transit Cost Effectiveness

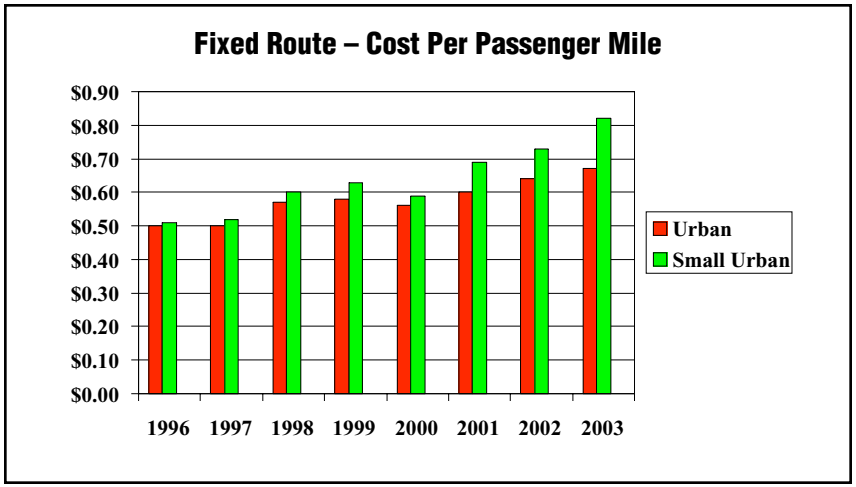
The following chart illustrates the cost per boarding by size category. This measurement has increased at approximately the rate of inflation for urban systems while rural and small urban systems have seen the cost per boarding increase at a much higher rate. Small urban systems saw a significant increase from 2000 to 2001 as significant service reductions increased the cost per hour of service and increased fares lead to fewer passengers. This moderated from 2001 to 2002. Rural systems faced these issues as well as being hit particularly hard by increased health care and other employee costs.



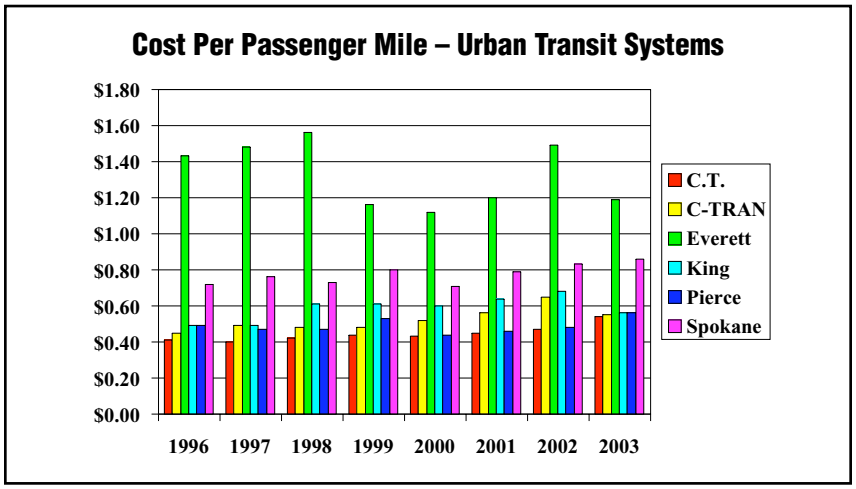
The following chart illustrates the cost per boarding for the urban transit systems. This chart illustrates the effect of the type of service on the cost per boarding and the problem with looking at a single measure when trying to determine the effectiveness of a transit system. Community Transit has a significantly higher cost per boarding than other systems due to the high level of express service operated. Express service experiences fewer boardings per hour than local service but has much longer trip lengths. A later measure shows that despite the high cost per boarding, Community Transit has the lowest cost per passenger mile of any of the urban systems. The overall cost per boarding has been held relatively constant over this period among the urban systems.



The following chart illustrates the cost per passenger-mile for urban and small urban transit systems. Passenger-mile data is not collected by rural transit systems. The trend for this measure generally reflects inflationary cost increases. The cost per passenger-mile increases sharply for small urban systems from 2000 to 2001 due to significant service reductions and fare increases during 2000 by several systems in this category.

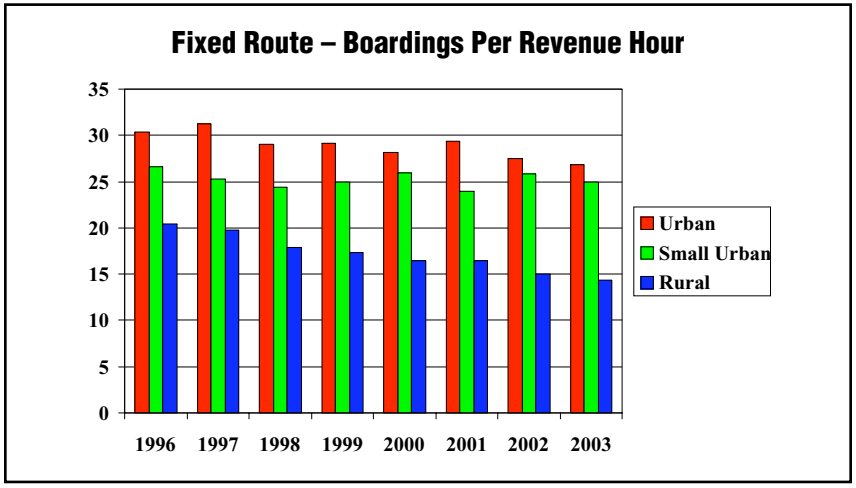


The following chart illustrates the low cost per passenger mile of Community Transit, a system with a high level of express service, while Everett Transit with little express service and short average trip length has a higher cost per passenger-mile. Spokane's cost per passenger-mile also reflects the nature of its service and the absence of the extensive express routes systems operated by the Puget Sound area systems.

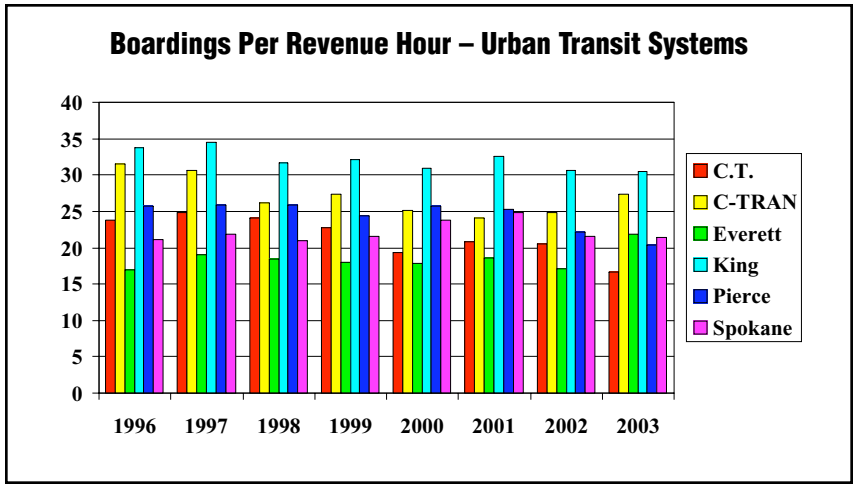


Transit Service Effectiveness

This measure also illustrates the importance of the characteristics of the area served on a transit system's performance. Boardings per revenue hour goes up with density and the type of service—local, urban service performs better than express service. Performance on this measure has been relatively constant for the urban and small urban systems but has dropped among rural systems. This and other measures illustrate the extreme difficulties facing many of the rural transit systems. The loss of both sales tax equalization and Motor Vehicle Excess Tax funding and the general economic downturn in rural Washington have forced systems to reduce service levels and increase fares. This has driven away passengers while spreading fixed costs over fewer hours of service.



The following chart illustrates the importance of density and service type on boardings per revenue hour. King County Metro, with over 30 boardings per revenue hour, exceeds the other urban systems in this measure. C-TRAN saw this measure decline as express service grew in relation to local service and has seen significant improvement on this measure over the past two years. The weakness of the Puget Sound economy reduced boardings and boarding-related measures in this area in 2002 and 2003.



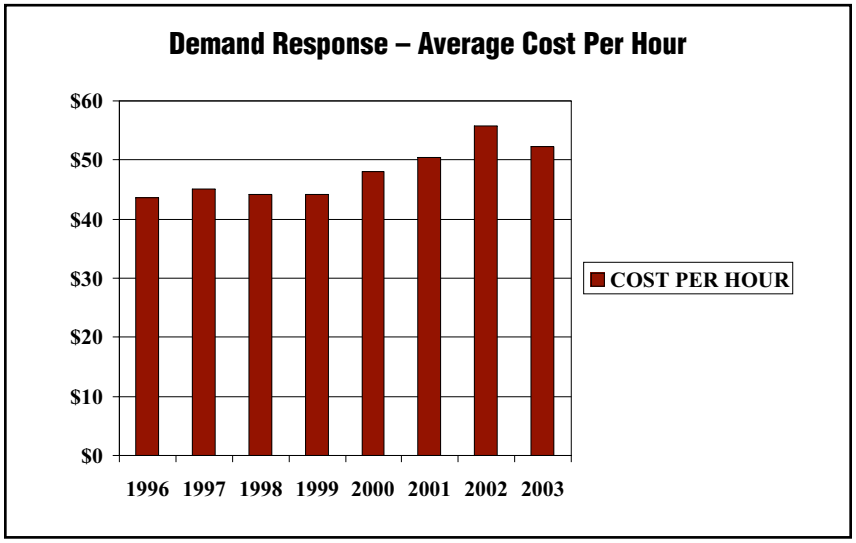
Demand Response Service

Transit systems are required by the Americans with Disabilities Act (ADA) to provide curb-to-curb (or door-to-door) service to persons with disabilities who are unable to use the fixed-route transit system. This service must be provided in the same service area and during the same time period as the fixed-routes systems. No trips may be denied and trip purpose may not be a consideration. All trips must be completed in a limited time period. Transit systems receive no federal funding to meet this mandate. This service has grown significantly, particularly when compared to the growth in fixed-route service. This cost service consumes from 10 percent to over 30 percent of the operating budget of transit systems.

Three measures are presented to track the performance of demand responsive service—cost per total hour, boardings per revenue hour, and cost per boarding.

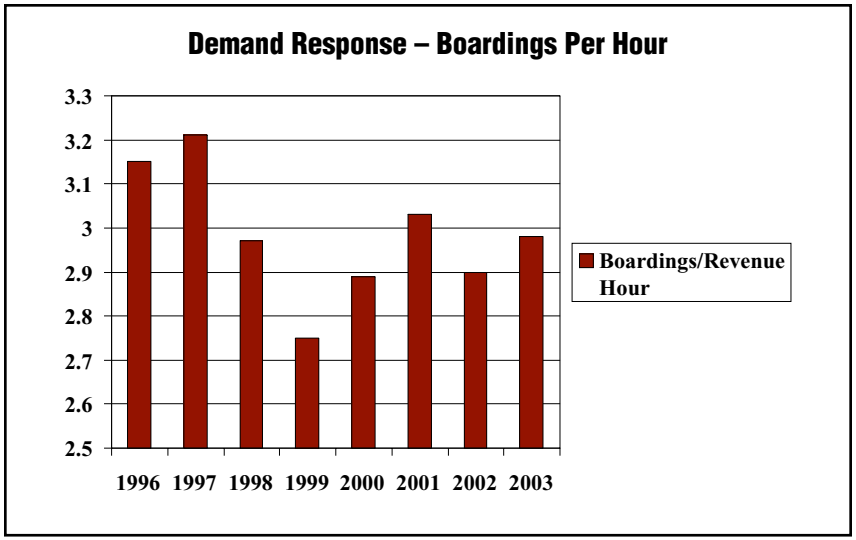
Demand Response Cost Per Total Hour

The following chart illustrates the cost per total hour for demand response service in Washington. The average cost is significantly lower than the fixed-route average cost. This is primarily due to the lower wage rates of demand response drivers. This service is contracted out by many systems to private or private non-profit agencies that pay lower wages than the public systems. Some transit systems operating their own demand response service pay these drivers a lower wage rate than fixed-route drivers.



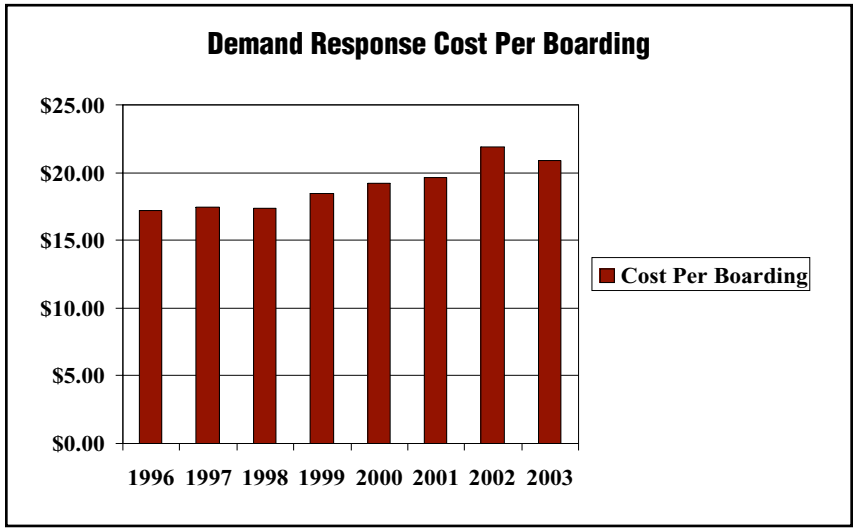
Demand Response Boardings Per Revenue Hour

Boardings per revenue hour have remained at approximately three boardings over the 5-year period. The nature of the service makes it very difficult to significantly improve on this measure. The increases in this measure since 1999 are related to the reduction in service areas and the elimination of least productive service by some transit agencies. As these least productive services, usually serving low-density suburban or rural areas, are eliminated, the complementary demand response service is also discontinued. Demand responsive trips in these areas tend to have long trip lengths and are difficult to group with other rides.



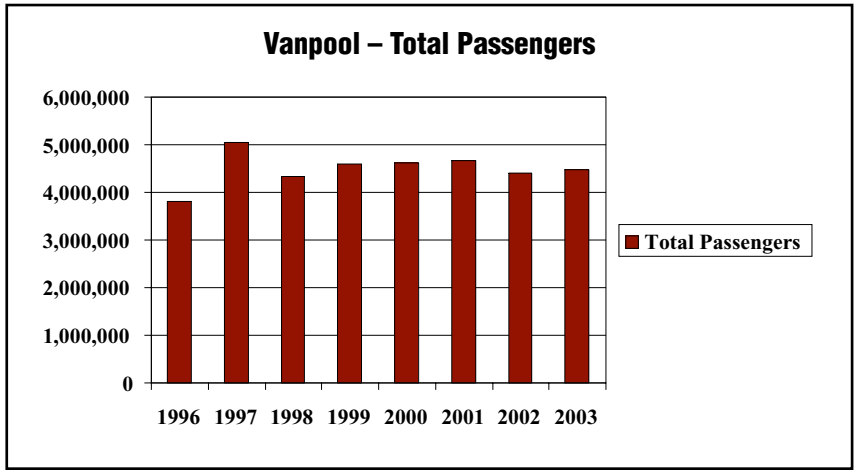
Demand Response Cost Per Boarding

The following chart illustrates the cost per boarding for demand response service. The cost per boarding for demand response service is approximately six times the cost per boarding for fixed-routes service. This measure was constant from 1996 to 1998 with costs increasing due to inflation and increased employee costs since 1999. The growth and aging of the suburban population of Washington is increasing demand in these areas. The cost of serving low-density suburban areas increases the cost per boarding measure.

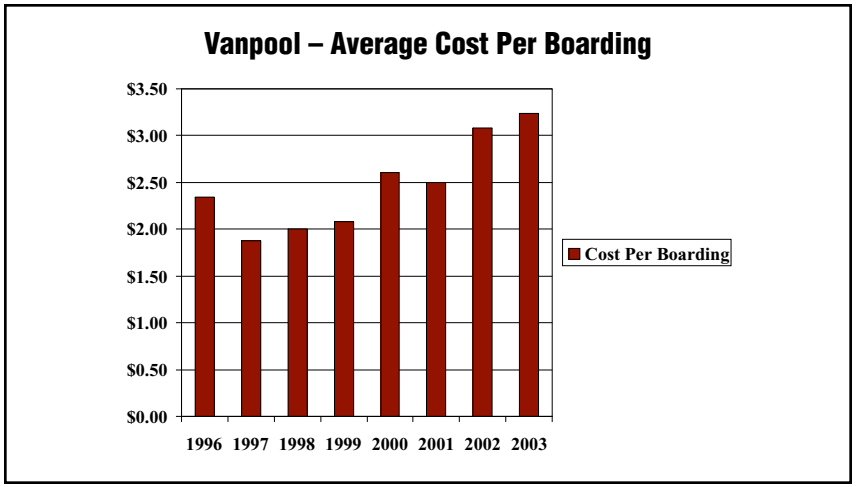


Vanpool Service

Washington transit systems are the most successful in the nation in operating vanpool programs. The systems operated by King County Metro and Community Transit are among the largest in the nation. Kitsap, Intercity, and Ben-Franklin have some of the largest programs operated by small to medium-size transit systems. The following chart illustrates the total number of passengers carried by vanpools.



The average cost per boarding for vanpool service is illustrated below. The cost-effectiveness of the vanpool program is particularly impressive when one considers average trip lengths and that in many systems the vanpool passenger fares cover a substantial portion of the operating and capital cost of the program. Some systems choose to subsidize vanpool fares to make use of the service as attractive as possible.

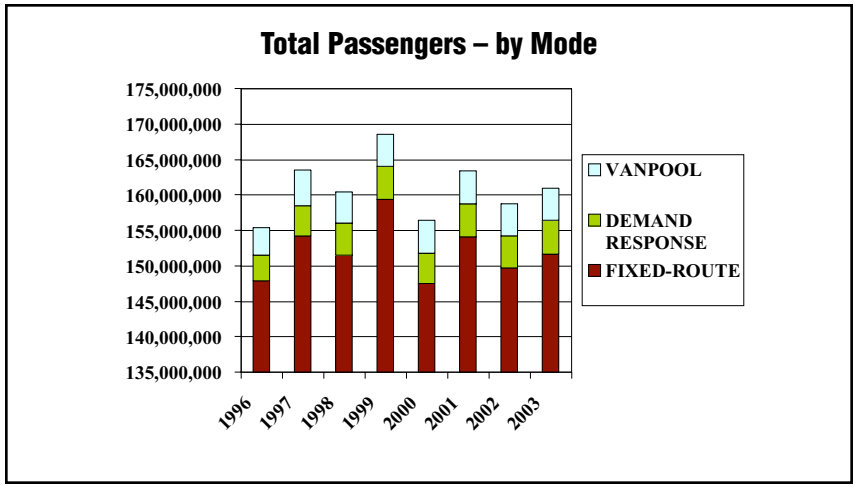


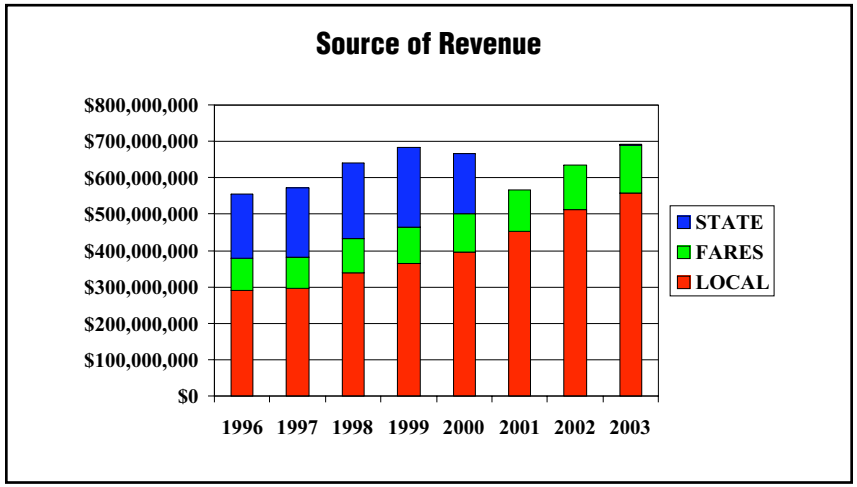
Other Measures – Total Passengers and Sources of Revenue

Two other measures are provided to present a more complete picture of transit operations in Washington State and the historical role of the state in funding these operations. The first of these measures is total passengers. Approximately 161,000,000 boardings per year or 545,000 per weekday take place on our state's public transportation systems. Approximately 93 percent of these trips occur on the fixed-route system. The boardings count was down in 2002 due to the weakness of the Puget Sound economy and showed modest recovery in 2003.

The second measure is the source of funding. Since 1996, locally approved sales tax funding has almost doubled while state funding fell from a peak of $217,000,000 in 1999 to less than $100,000 in 2002. The Special Needs and other state funding approved in the 2003 and 2005 legislative sessions increase state participation and will begin to appear with the 2004 data.

The following charts illustrate the total passengers by mode and sources of revenue.





Notes On Data Sources and Assumptions

The sources of the data used in this report are:

- The "Washington State Summary of Public Transportation." This report is published annually by the Washington State Department of Transportation, Public Transportation and Rail Division. This summary is required by Section 35.58.2796 RCW, to provide uniform data to transit providers, the Legislative Transportation Committee, and local and regional governments.
- The National Transit Database. The Federal Transit Administration collects data from each public transit agency and publishes it in the National Transit Database. This is the source of the passenger-mile data used in this report.

The cost, revenue, and ridership data for Sound Transit express bus service are reported with the data of the public transportation agency that operates the service. Other Sound Transit revenue and expense data (commuter rail, light rail, etc.) are not included in this report.

The data in this report are not adjusted for inflation.